

**Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382**

Final

**AIR QUALITY PERMIT
Issued under 401 KAR 52:030**

Permittee Name: A. O. Smith Water Products Company
Mailing Address: 8160 Holton Road, Florence, Kentucky 41042

Source Name: A. O. Smith Inc., Protective Coating Division
Mailing Address: Same as above


Source Location: 8160 Holton Road, Florence, Kentucky 41042

Permit Number: F-05-005
Source A. I. #: 2439
Activity #: APE2004000
Review Type: Operating, Conditional Major
Source ID #: 21 117-00140

Regional Office: Florence Regional Office
8020 Veterans Memorial Drive, Suite #110
Florence, KY 41042
(859) 292-6411

County: Kenton

Application
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E-Signed by Diana Andrews
VERIFY authenticity with ApproveIt 


**John S. Lyons, Director
Division for Air Quality**

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Definitions: *The following definitions apply to all abbreviations and variables used in this permit:*

PT – total particulate matter
PM10 – particulate matter equal to or smaller than 10 micrometers
CO – carbon monoxide
NO_x – nitrogen oxides
SO₂ – sulfur dioxide
Pb – lead
VOC – volatile organic compounds

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:030, Federally-enforceable permits for non-major sources.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**Group Requirements: Group 1****DAQ Emission point number (and application emission point number)**

EP# 01(6)	#1 Soda ash silo
EP#02 (6)	#2 Borax silo
EP#03 (6)	#3 Silica sand silo
EP#04 (6)	#4 Silica flour silo
EP#05 (12)	Mill addition weigh station

Description: Glass Frit Batch Unloading and Weighing. The four silos listed above have individual dust collectors with 99% efficiency and have the same applicable regulations, operating limitations and emission limitations. Each silo is used to store a specific raw material. The materials are then weighed by formula into specific poundage and blended into a homogeneous mixture. All silos were installed in 1984.

Annual hours of operation: 8760 hours/year

APPLICABLE REGULATIONS:

Regulation 401 KAR 59:010, New process operations applicable to each emission units which commenced construction on or after July 2, 1975.

401 KAR 52:030 – Federally-enforceable permits for non-major sources.

1. Operating Limitations:

The usage rate of materials used in all affected facilities shall be limited so as not to exceed the emission limitations listed in section B(2) below. Equipment and controls shall be operated in such manner as to assure compliance with the emission limitation in Section D, and in B2 below.

2. Emission Limitations:

The permittee shall not emit:

- i. PT/PM10 emission in excess of 6.00 pounds/hour, 26.28 tons/12-month rolling total from loadout and weighing processes. Self-imposed to preclude 401 KAR 52:020 – Title V permits. 401 KAR 59:010 standards for particulate emissions are superseded by the more stringent self-imposed limits.
- ii. Visible emissions shall not equal or exceed 20% Opacity [401 KAR 59:010, Section 3(1)(a)].

Compliance Demonstration Method:

PT/PM10 emission rate in (lbs/hour) = [(Monthly amount Processed/Monthly hours of operation) x Emission Factor listed in Kentucky EIS x (1-efficiency of control device)]. See also Testing Requirements below.

Rolling 12 month total=Summation of above equation for 12 month.

As long as the permittee is in compliance with the above lbs/hr limit; compliance is assumed for the purpose of 401 KAR 59:010.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

Pursuant to Regulation 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

The permittee shall monitor the following:

- a. Amount and type of materials added to each silo each month.
- b. The pressure drop across the baghouse at least once per day.
- c. Once per week, during all periods of raw material unloading operation, the permittee shall survey the emission unit for visible emissions and maintain a log of observations.
- d. If no visible emissions are observed then no further monitoring is required. If visible emissions are observed, the permittee shall perform a Method 9 reading. The opacity observed shall be recorded in the weekly log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.
- e. The monthly hours of operation.
- f. Annual inspection of emission capture and collection system.
- g. Operating parameters of the control equipments.
- h. Refer also to Section F.

5. Specific Recordkeeping Requirements:

The permittee shall maintain the records of operating parameters of the control equipment which ensures the efficiency of the unit as required in the permit. A. O. Smith Corporation is required to keep records of all monitoring required in "Specific Monitoring Requirements" above.

6. Specific Reporting Requirements:

Any exceedance over the opacity or particulate matter emission limitations as stated in this permit shall be reported to the Division as specified in Section F(6). The permittee shall report VOC, hazardous air pollutants (HAP), and particulate emissions as part of the semiannual reporting as required in Section F(5). Refer also to Section D.

7. Specific Control Equipment Operating Conditions:

The control equipment shall be operated and maintained in accordance with the manufacturer's recommendation unless otherwise allowed in this permit. Also see Section E.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Group Requirements: Group 2

EP 06 (01) Continuous smelters #1.

EP 07 (02) Continuous smelters #2.

EP 08 (03) Continuous smelters #3.

EP 09 (04) Continuous smelters #4.

Description: The above furnaces use natural gas and are each rated at 10 million Btu/hour. The homogeneous mixture is augered into each furnace and melted at temperatures ranging between 1,950 degrees Fahrenheit and 2,300 degrees. The emissions are vented to a jet venturi scrubber followed by a condensing column and a high energy venturi with demister.

Control efficiency: 99%

Annual hours of operation: 8760 hours/year

Construction commenced: 1984

APPLICABLE REGULATIONS:

401 KAR 52:030- Federally-enforceable permits for non-major sources.

401 KAR 59:010- New process operations. Applies to particulate and visible emissions from all emission activities except for fuel usage and fugitive loss.

401 KAR 63:010- Fugitive emissions. Applies to fugitive particulate emissions.

401 KAR 63:021- Existing sources emitting toxic air pollutants. Applies to HAP emissions.

NOTE: See total nitrogen oxide, and PM/PM10 Conditional Major source-wide emission limitations, specific reporting requirements in Section D.

1. Operating Limitations:

The usage rate of materials used in all affected facilities shall be limited so as not to exceed the emission limitations listed in section B(2) below. Equipment and controls shall be operated in such manner as to assure compliance with the emission limitation in Section D, and in B2 below.

2. Emission Limitations:

The permittee shall not emit:

a. Pursuant to 401 KAR 59:010, visible emission equal to or greater than twenty (20) percent opacity. The opacity shall be determined by Reference Method 9 of Appendix A to 40 CFR 60, filed by reference in 401 KAR 59:010.

b. Particulate emissions of each unit shall not exceed the PM emission rate limit calculated by the following formula.

$$E=3.59 P^{0.62}$$

Where P is the process weight (total weight of all materials introduced into each emission unit which may cause the emissions of particulate matter) in tons/hour. If the process weight equals or is less than 0.5 ton/hour, then the particulate matter emission rate from each unit shall not exceed 2.34 Lbs/hr.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Compliance Demonstration Method:**

For emissions from each emission point:

- The permittee shall demonstrate compliance with the particulate emission limit through the following equation:

Hourly particulate emission (pounds/hour)

$$= \sum [\text{furnace thruput (tons/hr)} \times \text{EF* lb PM/ton processed}] \times [(100 - \text{overall control efficiency})/100]$$

***Note:** Particulate matter emission factor (EF) and overall control efficiency found in the emission inventory system (EIS) shall be used. The EF and the %control efficiency shall be replaced with stack test results.

3. Testing Requirements:

The owner or operator shall conduct a performance test to determine the overall control efficiency of the Jet Venturi Scrubber, Condenser, and High Energy Venturi with Demister within 6 months of the issuance date of this permit. Refer also to Section G (d).

4. Specific Monitoring Requirements:

The permittee shall monitor the following:

- a. The daily glass frit production rate and daily hours of operation.
- b. The pressure drop across the scrubber and each control systems at least once per day.
- c. Once per week, during all periods of melting operation, the permittee shall survey the emission unit for visible emissions and maintain a log of observations.
- d. If no visible emissions are observed then no further monitoring is required. If visible emissions are observed, the permittee shall perform a Method 9 reading. The opacity observed shall be recorded in the weekly log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.
- e. All ductwork for the scrubber shall be inspected semiannually.
- f. Annual inspection of emission capture and collection system.
- g. The liquid flow rate into the high energy venturi with demister.
- h. Scrubbing liquid flow rates, and scrubbing liquid pH.
- i. Monthly fuel usage records.
- j. Refer also to Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

The permittee shall maintain the records of the following:

- a. Operating parameters of the control equipment listed above in monitoring, which ensures the efficiency of the unit as required in the permit.
- b. All monitoring required in "Specific Monitoring Requirements" above.

6. Specific Reporting Requirements:

- a. Any exceedance over the opacity or particulate matter emission limitations as stated in this permit shall be reported to the Division as specified in Section F(6).
- b. The permittee shall report particulate emissions as part of the semiannual reporting as required in Section F(5).
- c. The permittee shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in "Emission Limitation" of this permit.

7. Specific Control Equipment Operating Conditions:

The control equipment shall be operated and maintained in accordance with the manufacturer's recommendation unless otherwise allowed in this permit. See Section E also.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP 10 (05) Rotary batch smelter

Description: The above furnace use natural gas rated at 3 million Btu/hour. Materials are weighed by formula into 1,000 pound batches and blended into a homogeneous mixture and augered into the rotary smelter and melted at temperatures ranging between 1,950 degrees Fahrenheit and 3,000 degrees. The emissions are vented to a jet venturi scrubber before being released to the atmosphere.

Control efficiency: 99%

Annual hours of operation: 8760 hours/year

Construction commenced: 1984

APPLICABLE REGULATIONS:

401 KAR 52:030- Federally-enforceable permits for non-major sources. Applies to HAP emissions.

401 KAR 59:010- New process operations. Applies to particulate and visible emissions from all emission activities except for fuel usage and fugitive loss.

401 KAR 63:010- Fugitive emissions. Applies to fugitive particulate emissions.

401 KAR 63:021- Existing sources emitting toxic air pollutants. Applies to HAP emissions.

NOTE: See total nitrogen oxide, and PM/PM10 Conditional Major source-wide emission limitations, specific monitoring and recordkeeping requirements in Section D.

1. Operating Limitations:

The usage rate of materials used in all affected facilities shall be limited so as not to exceed the emission limitations listed in section B(2) below. Equipment and controls shall be operated in such manner as to assure compliance with the emission limitation in Section D, and in B2 below.

2. Emission Limitations:

The permittee shall not emit:

- a. Pursuant to 401 KAR 59:010, visible emission equal to or greater than twenty (20) percent opacity. The opacity shall be determined by Reference Method 9 of Appendix A to 40 CFR 60, filed by reference in 401 KAR 59:010.
- b. Particulate emissions of each unit shall not exceed the PM emission rate limit calculated by the following formula.

$$E=3.59 P^{0.62}$$

Where P is the process weight (total weight of all materials introduced into each emission unit which may cause the emissions of particulate matter) in tons/hour. If the process weight equals or is less than 0.5 ton/hour, then the particulate matter emission rate from each unit shall not exceed 2.34 Lbs/hr.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Compliance Demonstration Method:**

For emissions from each emission point:

- The permittee shall demonstrate compliance with the particulate emission limit through the following equation:

Hourly particulate emission (pounds/hour)

$$= \sum [\text{furnace thruput (tons/hr)} \times \text{EF* lb PM/ton processed}] \times [(100 - \text{overall control efficiency})/100]$$

***Note:** Particulate matter emission factor (EF) and overall control efficiency found in the emission inventory system (EIS) shall be used. The EF and the %control efficiency shall be replaced with stack test results.

3. Testing Requirements:

The owner or operator shall conduct a performance test to determine the overall control efficiency of the Jet Venturi Scrubber within 6 months of the issuance date of this permit. Refer also to Section G (d).

4. Specific Monitoring Requirements:

The permittee shall monitor the following:

- a. The daily glass frit production rate and daily hours of operation.
- b. The pressure drop across the scrubber at least once per day.
- c. Once per week, during all periods of melting operation, the permittee shall survey the emission unit for visible emissions and maintain a log of observations.
- d. If no visible emissions are observed then no further monitoring is required. If visible emissions are observed, the permittee shall perform a Method 9 reading. The opacity observed shall be recorded in the weekly log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.
- e. All ductwork for the scrubber shall be inspected semiannually.
- f. Annual inspection of emission capture and collection system.
- g. Scrubbing liquid flow rates, and scrubbing liquid pH.
- h. Monthly fuel usage records.
- i. Refer also to Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

The permittee shall maintain the records of the following:

- a. Operating parameters of the control equipment listed above in monitoring, which ensures the efficiency of the unit as required in the permit.
- b. All monitoring required in "Specific Monitoring Requirements" above.

6. Specific Reporting Requirements:

- a. Any exceedance over the opacity or particulate matter emission limitations as stated in this permit shall be reported to the Division as specified in Section F(6).
- b. The permittee shall report particulate emissions as part of the semiannual reporting as required in Section F(5).
- c. The permittee shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in "Emission Limitation" of this permit.

7. Specific Control Equipment Operating Conditions:

The control equipment shall be operated and maintained in accordance with the manufacturer's recommendation unless otherwise allowed in this permit. See Section E also.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Group Requirements: Group 3

EP 11 (07) Pilot Lab Grit Blaster

EP 12 (11) Dry ball Mill

Description:

Control equipment: Baghouse with efficiency of 85%

Annual hours of operation: 8760 hours/year

Construction commenced: 1984

APPLICABLE REGULATIONS:

401 KAR 59:010- New process operations. Applies to particulate and visible emissions from units constructed on or after July 2, 1975.

401 KAR 52:030 – Federally-enforceable permits for non-major sources.

401 KAR 63:010- Fugitive emissions. Applies to fugitive particulate emissions.

1. Operating Limitations:

The usage rate of materials used in all affected facilities shall be limited so as not to exceed the emission limitations listed in section B(2) below. Equipment and controls shall be operated in such manner as to assure compliance with the emission limitation in Section D, and in B2 below.

2. Emission Limitations:

The permittee shall not emit:

- a. Particulate emission in excess of 1.5 pounds/hour, 6.57 tons/12-month rolling total from EP 12 (11) dry ball mill. Self-imposed to preclude 401 KAR 52:020 – Title V permits. 401 KAR 59:010 standards for particulate emissions are superseded by the more stringent self-imposed limits.
- b. Pursuant to 401 KAR 59:010, visible emission equal to or greater than twenty (20) percent opacity. The opacity shall be determined by Reference Method 9 of Appendix A to 40 CFR 60, filed by reference in 401 KAR 59:010.
- c. Particulate emissions of EP 11 (07) pilot lab grit blaster shall not exceed the PM emission rate limit calculated by the following formula.

$$E=3.59 P^{0.62}$$

Where P is the process weight (total weight of all materials introduced into the emission unit which may cause the emissions of particulate matter) in tons/hour. If the process weight equals or is less than 0.5 ton/hour, then the particulate matter emission rate from each unit shall not exceed 2.34 Lbs/hr.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Compliance Demonstration Method:**

For emissions from each emission point:

The permittee shall demonstrate compliance with the particulate emission limit through the following equation:

Hourly particulate emission (pounds/hour)

$$= \text{Process weight rate (lbs/hr)} \times \text{EF* lb PM/lbs grit material/frit and additives processed} \times [(100 - \text{overall control efficiency*})/100]$$

As long as the permittee is in compliance with the above lbs/hr limit; compliance is assumed for the purpose of 401 KAR 59:010.

Annual particulate emissions (tons/12-month rolling average)

$$= [\text{Process weight rate (tons/12-month)} \times \text{EF* lb PM/ton thruput/2000 (lbs/ton)}] \times [(100 - \text{overall control efficiency*})/100]$$

***Note:** Particulate matter emission factor (EF) and overall control efficiency found in the emission inventory system (EIS) shall be used.

3. Testing Requirements:

Pursuant to Regulation 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

The permittee shall monitor the following:

- a. The daily hours of operation and the amount of grit material/frit and additives used.
- b. Once per week, during all periods of grinding and mixing operation, the permittee shall survey the emission unit for visible emissions and maintain a log of observations.
- c. If no visible emissions are observed then no further monitoring is required. If visible emissions are observed, the permittee shall perform a Method 9 reading. The opacity observed shall be recorded in the weekly log. The reading shall be performed by a representative of the permittee certified in Visible Emissions Evaluations. The permittee shall maintain a list of all individuals that are certified Visible Emissions Evaluators and the date of certification.
- d. Annual inspection of emission capture and collection system.
- e. The pressure drop across the baghouse at least once per day.
- f. Refer also to Section F.

5. Specific Recordkeeping Requirements:

The permittee shall maintain the records of the following:

- a. Operating parameters of the control equipment listed above in monitoring, which ensures the efficiency of the unit as required in the permit.
- b. All monitoring required in "Specific Monitoring Requirements" above.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

- a. Any exceedance over the opacity or particulate matter emission limitations as stated in this permit shall be reported to the Division as specified in Section F(6).
- b. The permittee shall report particulate emissions as part of the semiannual reporting as required in Section F(5).
- c. The permittee shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in "Emission Limitation" of this permit.

7. Specific Control Equipment Operating Conditions:

The control equipment shall be operated and maintained in accordance with the manufacturer's recommendation unless otherwise allowed in this permit. See Section E also.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

	<u>Description</u>	<u>Generally Applicable Regulation</u>
1.	Wet Ball Mill	401 KAR 59:010
2.	Epworth Ball Mill	401 KAR 59:010
3.	Lab Rotary Batch Smelter	401 KAR 59:010
4.	Lab POT Smelter	401 KAR 59:010
5.	Lab Spraybooth	401 KAR 59:010
6.	Spaceheating	NA

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10, compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. Emissions of PM/PM10, and nitrogen oxide, as measured by methods referenced in 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.
3. Emissions of PM/PM10, and nitrogen oxide shall not exceed 90 tons during any consecutive 12 month period.
4. Pursuant to 401 KAR 52:030, single HAP emissions shall not exceed 9 tons/yr and combined HAP emissions shall not exceed 22.5 tons/yr based on a 12 month rolling total for the entire source to preclude a major source Title V classification.

- **Compliance Demonstration Method:**

- a. The permittee shall demonstrate compliance with the source wide PM/PM10 emission limit through the following equation:

Annual particulate emissions (tons/12-month rolling total)

$$= \sum_{n=1}^{12} [\text{monthly process material throughput to each particulate emitting emission activity (tons/month)} \times \text{particulate EF* for each emission activity (pounds/ton of process material)} \times (1 - \text{particulate control efficiency* (\%)} / 100)]$$

***Note:** Particulate matter emission factor (EF) and overall control efficiency found in the emission inventory system (EIS) shall be used. The EF and the %control efficiency shall be replaced with stack test results.

- b. The permittee shall demonstrate compliance with the source wide nitrogen oxide emission limit through the following equation:

Nitrogen oxide emission (tons/month)

$$= \sum \{[\text{furnace thruput (tons/month)} \times \text{nitrogen oxide EF* (lb /ton processed)}] \times [(100 - \text{overall control efficiency*}) / 100] + \sum [\text{monthly gas consumumption rate (mmscf/month)} \times 100 (\text{lbs/mm scf})] \} / 2000$$

A rolling 12 month total for nitrogen oxide shall also be calculated at the end of each month in order to show compliance with the annual limit.

***Note:** Nitrogen oxide emission factor (EF) and overall control efficiency found in the emission inventory system (EIS) shall be used. The EF and the %control efficiency shall be replaced with stack test results.

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (Continued)

- c. Compliance with the source wide (HAP) emissions shall be shown using the following equation:

$$\begin{aligned} & \text{Rolling 12-month HAP emissions (tons/yr)} \\ &= \sum_{n=1}^N [(P_i \times EF_i) / 2000] \times [(100 - \text{overall control efficiency}) / 100] \end{aligned}$$

Where P_i = Frit produced in lbs Produced/month.

EF_i = HAP emission factor in lbs/lbs Produced (Based on worst case scenario).

$i = 1, \dots, j$, where i is total HAP emission units

$N = 12$ months per year.

***Note:** Overall control efficiency found in the emission inventory system (EIS) shall be used. The %control efficiency shall be replaced with stack test results.

- **Specific Reporting Requirements:**

Any exceedance over the nitrogen oxide, PM/PM10, and HAP emission limitations as stated in this permit shall be reported to the Division as specified in Section F(6). The permittee shall report hazardous air pollutants (HAP), nitrogen oxide, and particulate emissions as part of the semiannual reporting as required in Section F(5).

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV)(1) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place (as defined in this permit), and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality[401 KAR 52:030 Section 3(1)(f)1a and Section 1a (7) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
3. In accordance with the requirements of 401 KAR 52:030 Section 3(1)f the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit;
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to 401 KAR 52:030 Section 22. All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.5 [Section 1b V(3) and (4) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
9. Pursuant to 401KAR 52:030, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit in accordance with the following requirements:
 - a. Identification of each term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- f. The certification shall be postmarked by January 30th of each year. **Annual compliance certifications should be mailed to the following addresses:**

Division for Air Quality
Florence Regional Office
8020 Veterans Memorial Dr.
Florence, KY 41042

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

10. In accordance with 401KAR 52:030, Section 3(1)(d), the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KEIS emission survey is mailed to the permittee. If a KYEIS emission report is not mailed to the permittee, comply with all other emission reporting requirements in this permit.
11. Pursuant to Section VII (3) of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork..
12. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:
- a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
 - i. The size and location of both the original and replacement units; and
 - ii. Any resulting change in emissions;
 - b. The PTE of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
 - c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
 - d. The replacement unit shall comply with all applicable requirements; and
 - e. The source shall notify Regional office of all shutdowns and start-ups.
 - f. Within six (6) months after installing the replacement unit, the owner or operator shall:
 - i. Re-install the original unit and remove or dismantle the replacement unit; or
 - ii. Submit an application to permit the replacement unit as a permanent change.

SECTION G - GENERAL PROVISIONS

(a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030 Section 3(1)(b) and is also a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision, or denial of a permit [Section 1a (2) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a (5) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030 Section 18. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:030 Section 12;
 - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
4. Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.
5. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Sections 1a (6) and (7) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].

SECTION G - GENERAL PROVISIONS (CONTINUED)

6. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:030 Section 7(1)].
7. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a (11) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
8. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a (3) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
9. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a (12)(b) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
10. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038 Section 3(6) [Section 1a (9) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
11. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:030 Section 11(3)].
12. This permit does not convey property rights or exclusive privileges [Section 1a (8) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
13. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
14. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.
15. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.

SECTION G - GENERAL PROVISIONS (CONTINUED)

16. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
17. Permit Shield – A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
 - (a) Applicable requirements that are included and specifically identified in this permit; and
 - (b) Non-applicable requirements expressly identified in this permit.
18. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030 Section 3(1)(c)].
19. The authority to operate granted through this permit shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:030 Section 8(2)].

(b) Permit Expiration and Reapplication Requirements

This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:030 Section 12].

(c) Permit Revisions

1. Minor permit revision procedures specified in 401 KAR 52:030 Section 14 (3) may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:030 Section 14 (2).
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

SECTION G - GENERAL PROVISIONS (CONTINUED)**(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements**

No construction authorized by this permit

1. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.
2. Pursuant to 401 KAR 50:045 Section 5 in order to demonstrate that a source is capable of complying with a standard at all times, a performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirement on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

(e) Acid Rain Program Requirements

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:030 Section 23(1), an emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
 - d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.
2. Notification of the Division does not relieve the source of any other local, state or federal notification requirements.

SECTION G - GENERAL PROVISIONS (CONTINUED)

3. Emergency conditions listed in General Provision G(f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030 Section 23(3)].
4. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof[401 KAR 52:030 Section 23(2)].

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center
P.O. Box 1515
Lanham-Seabrook, MD 20703-1515.

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
 - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION H - ALTERNATE OPERATING SCENARIOS

Not applicable

SECTION I - COMPLIANCE SCHEDULE

Not applicable